

Indiana's Statewide Asthma Management Plan for Students

Indiana Joint Asthma Coalition
2014



The Goal of an Asthma Management Plan (AMP)

1. To reduce or prevent uncontrolled asthma symptoms
2. To improve asthma health outcomes
3. To improve communication between health care professionals and the patient (and their family)



Research demonstrates the benefit of Asthma Management Plans

- ❖ Improves lung function
- ❖ Decreases number of school days missed
- ❖ Improves self-efficacy (the ability to cope with adversity)
- ❖ Decreases number of ER visits and hospitalizations
- ❖ Decreases overall health care costs



Need for increased AMP usage

- ❖ Uncontrolled asthma symptoms and related hospitalizations and deaths occurring each year in Indiana could be avoided if the patient and their family knew how best to handle emergency asthma symptoms or an asthma exacerbation.
- ❖ According to the CDC, daily and emergency asthma management is best accomplished through the use of an AMP
- ❖ However, less than half of all Indiana children with asthma have ever been given a plan

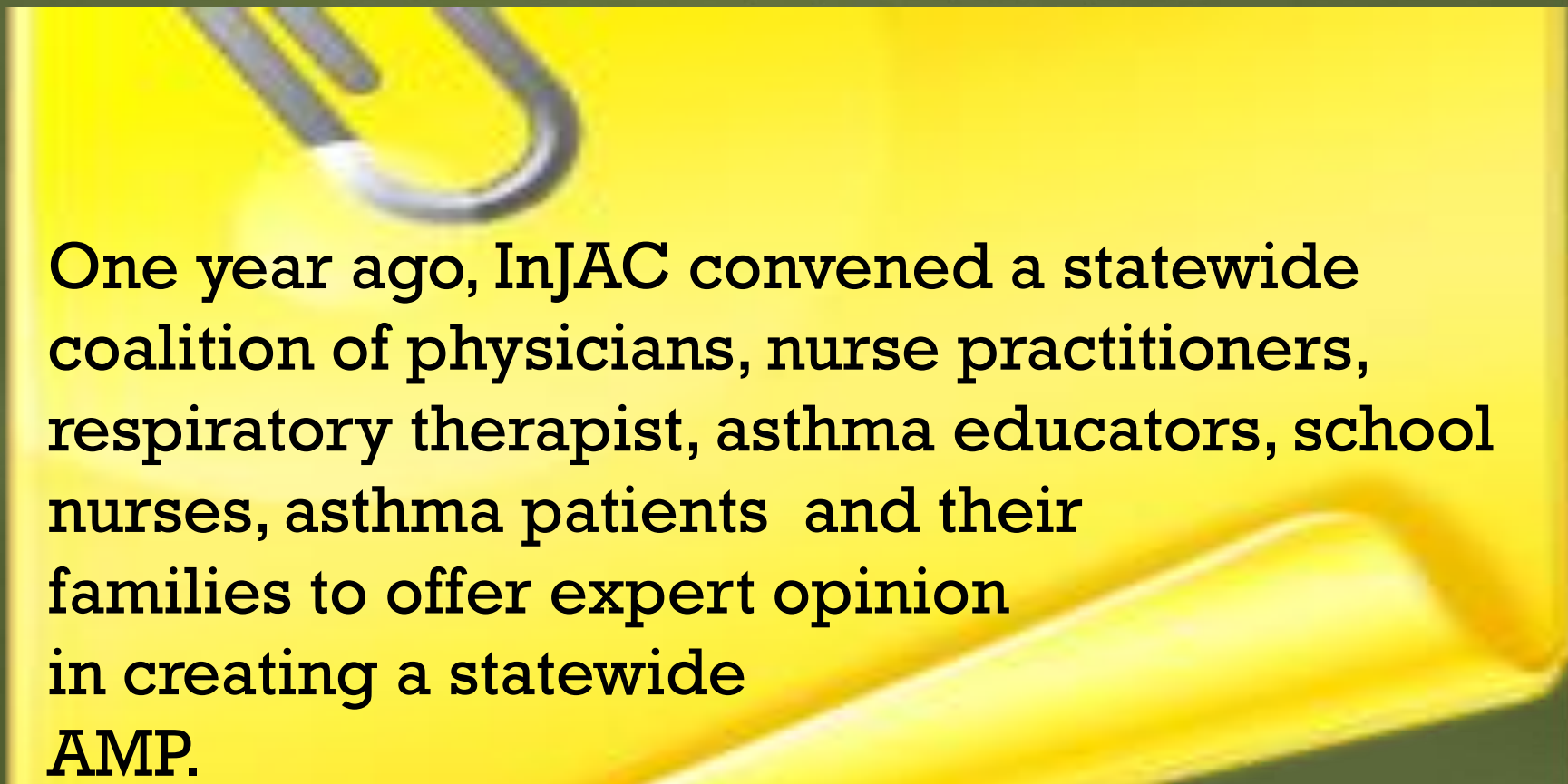


Goal of Indiana Joint Asthma Coalition's (InJAC) Statewide AMP

- ❖ By initiating the availability of a uniform, single-page, statewide AMP, InJAC will be able to train all schools and medical personnel on proper usage, either face-to-face or on line.
- ❖ Proper training will promote consistent use across the state and decrease confusion between patients, parents, schools and physicians. This will ultimately improve asthma outcomes among Indiana residents.



A collaborative effort

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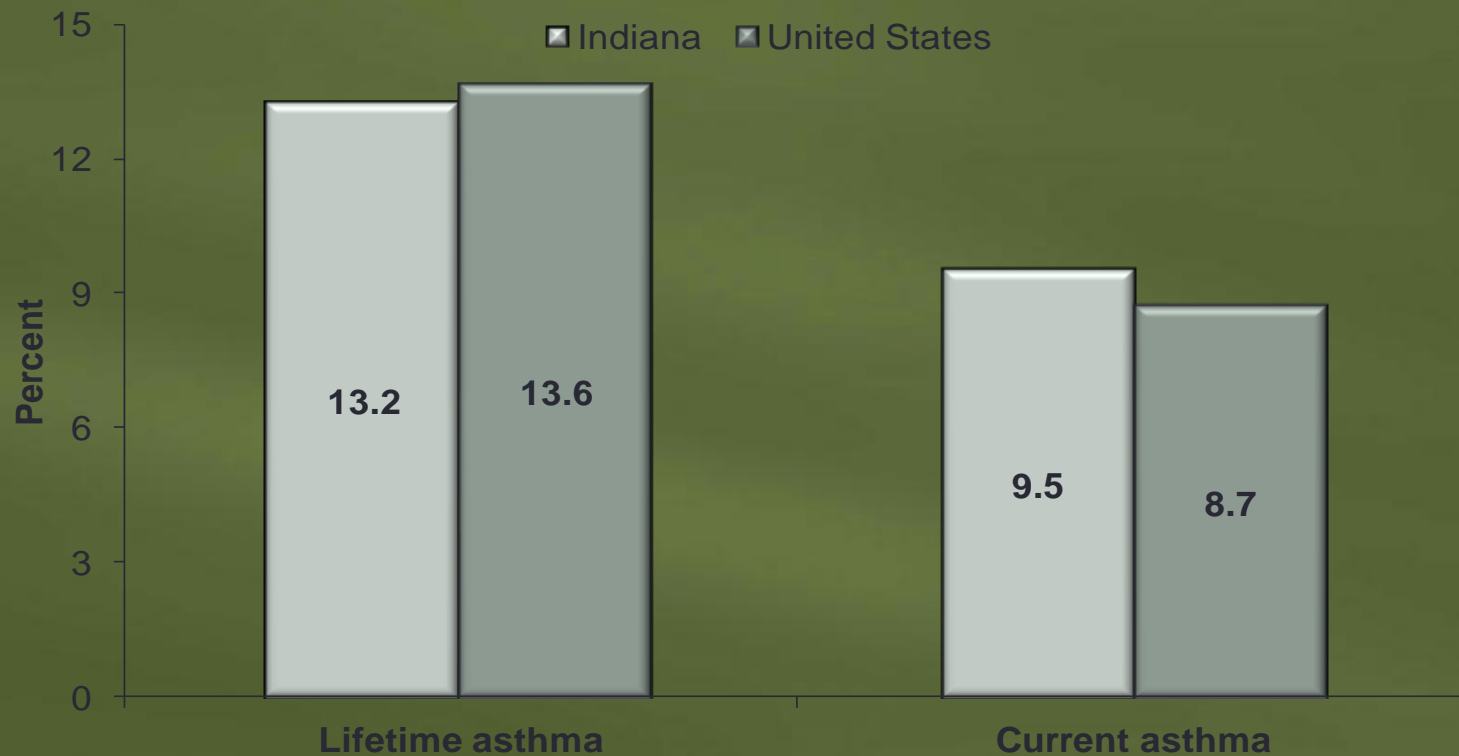
One year ago, InJAC convened a statewide coalition of physicians, nurse practitioners, respiratory therapist, asthma educators, school nurses, asthma patients and their families to offer expert opinion in creating a statewide AMP.

Asthma in Indiana children

Approximately 1 in 10 (9.5%) Indiana children (ages 0-17) are currently diagnosed with asthma.



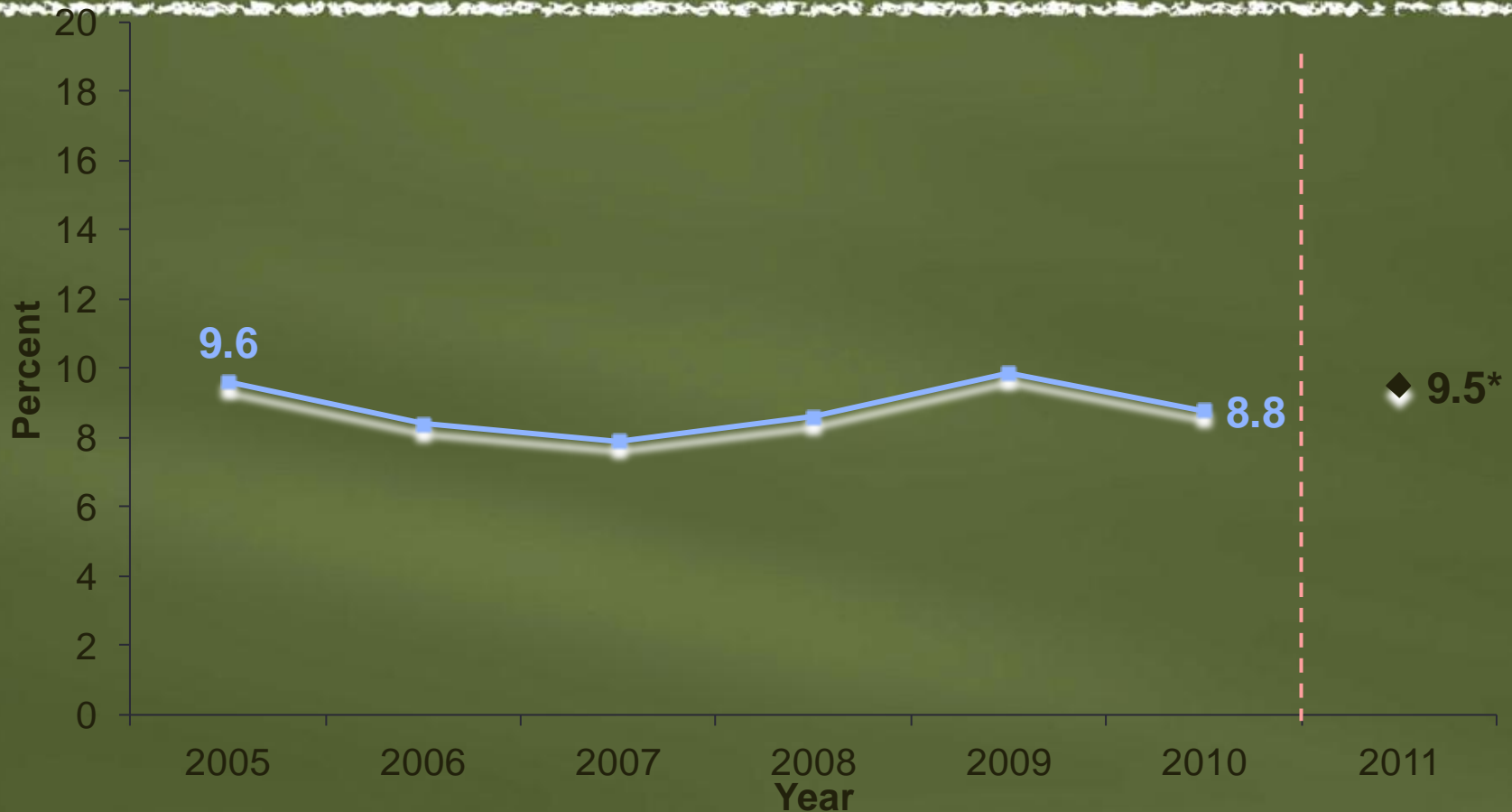
Prevalence of Asthma among Children (0-17 years): Indiana and United States



Lifetime asthma = history of asthma

Current asthma = active symptoms and on medication

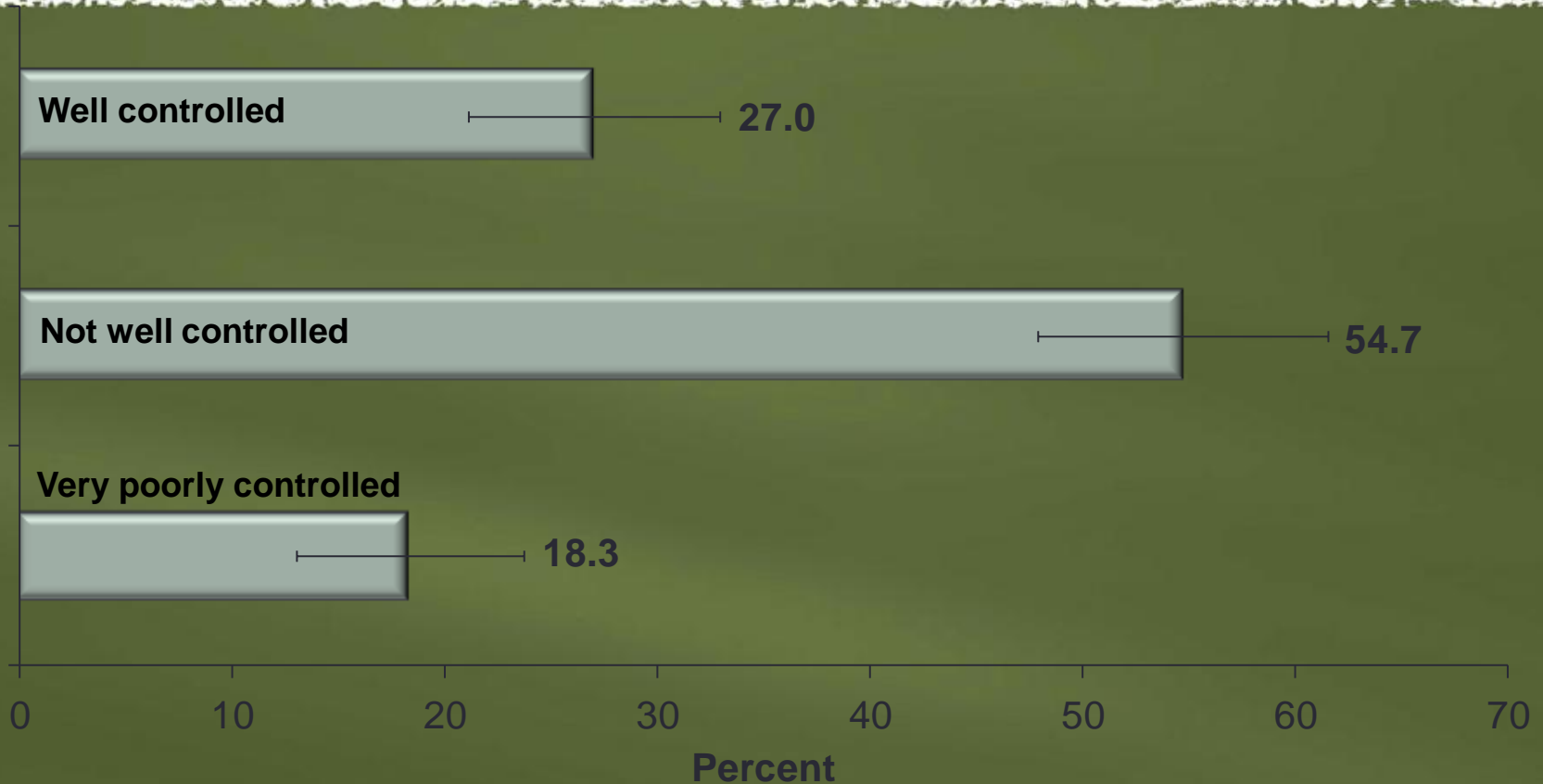
Prevalence of current asthma among children (0-17 years) , Indiana, 2005–2010, 2011



*The 2011 prevalence estimate was determined using a new, more precise methodology, including the addition of cell phone respondents and new weighting techniques; therefore, the 2011 estimate should not be compared to earlier prevalence estimates.

Source: CDC and ISDH DAT. (2011). Behavioral Risk Factor Surveillance System Prevalence Data, 2000-2011.

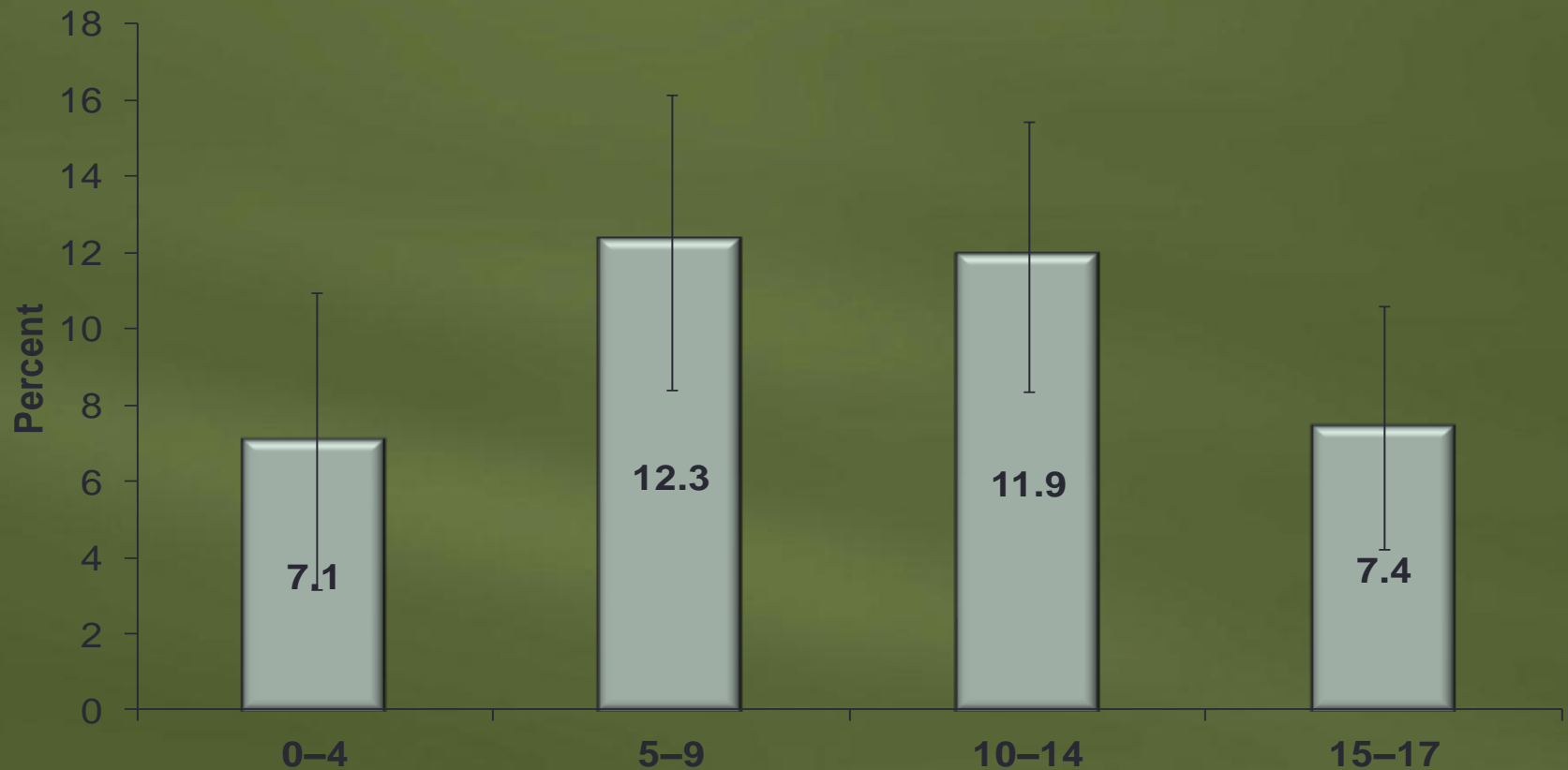
Asthma control among children (0–17 years), Indiana, 2006–2010



*Percents are presented with 95% confidence intervals.

Source: [CDC](#) and [ISDH DAT](#). (2012). *Behavioral Risk Factor Surveillance System Child Multi-year Asthma Call-back Survey, 2006-2010*.

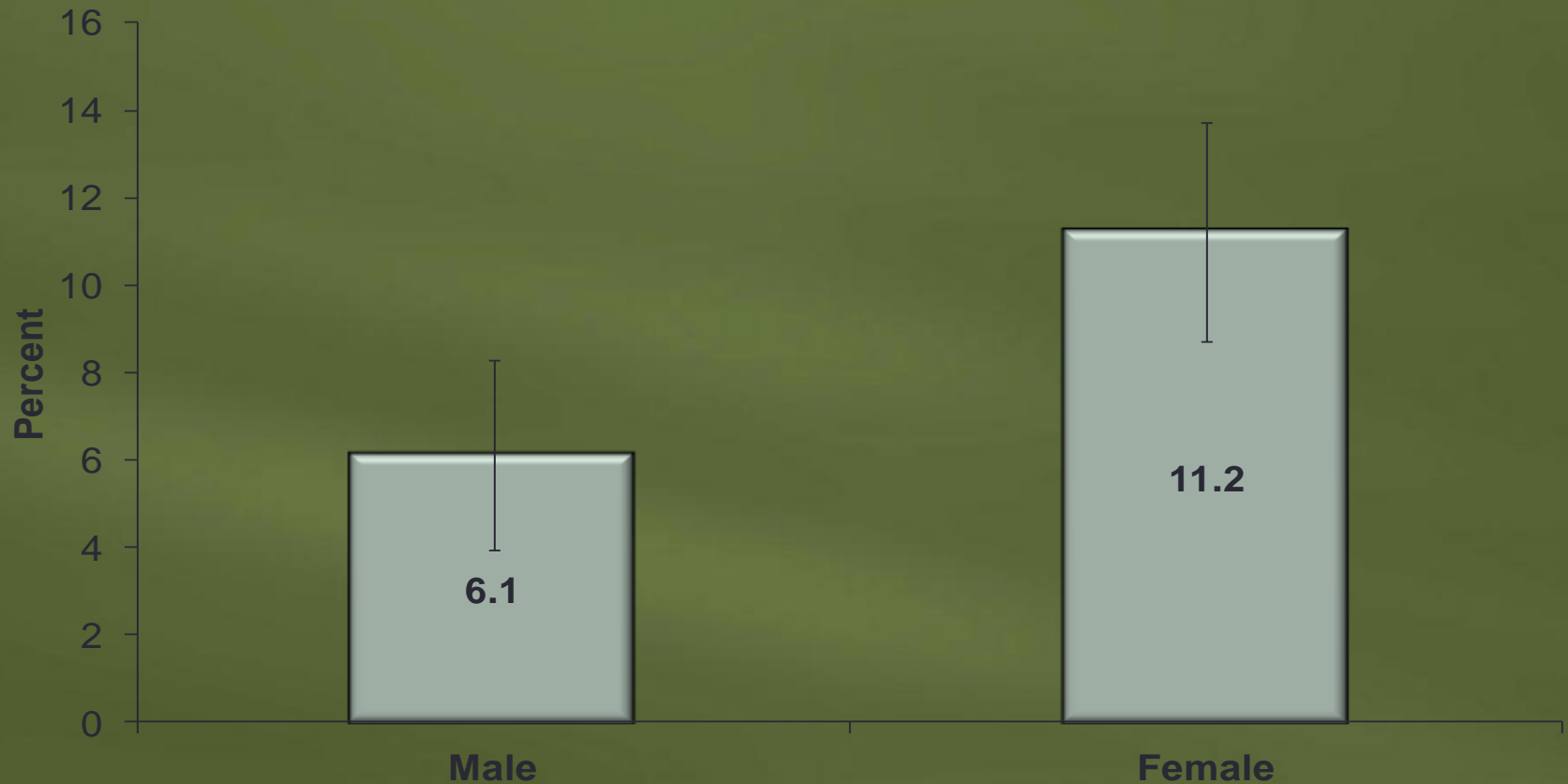
Prevalence of current asthma among children (0-17 years) by age group, Indiana, 2011



*Prevalence rates are presented with 95% confidence intervals.

Source: CDC and ISDH DAT. (2012). *Behavioral Risk Factor Surveillance System Prevalence Data, 2011*.

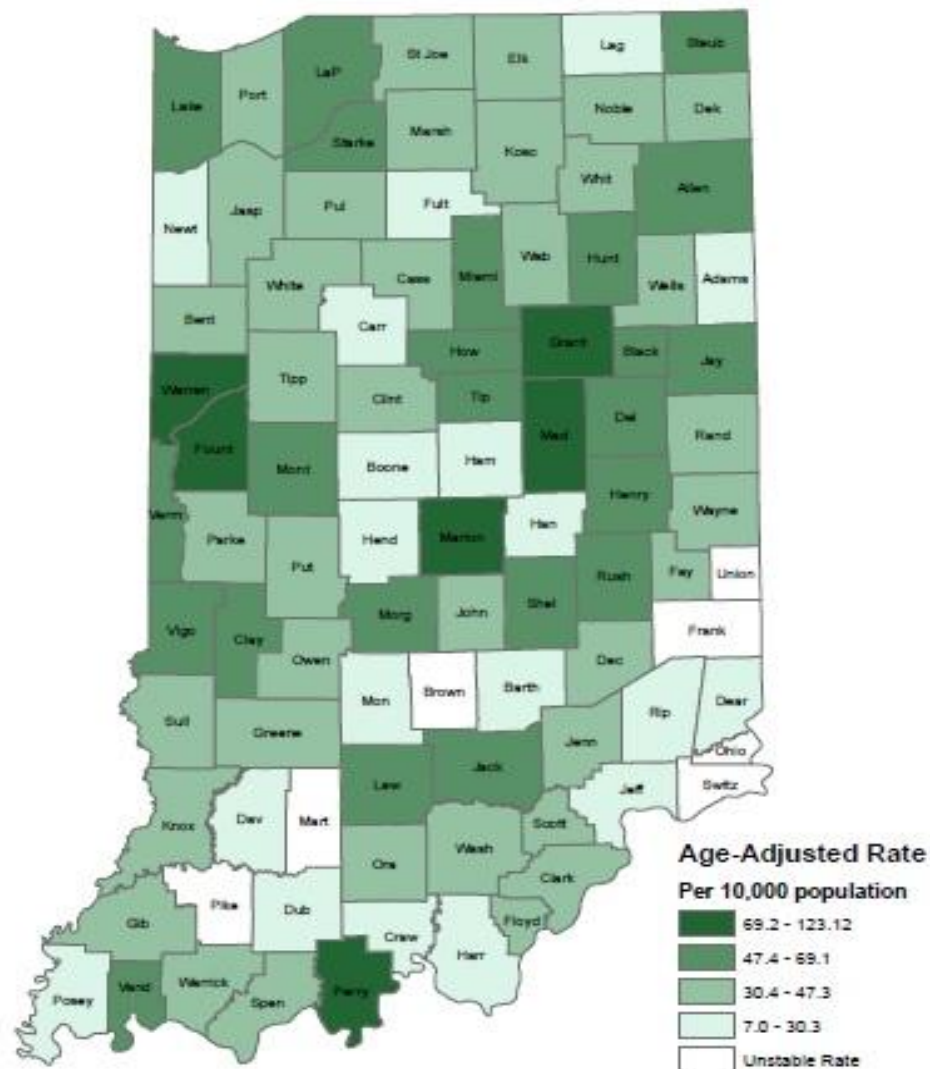
Prevalence of current asthma among children (0-17 years) by gender, Indiana, 2011



*Prevalence rates are presented with 95% confidence intervals.

Source: [CDC](#) and [ISDH DAT](#). (2012). *Behavioral Risk Factor Surveillance System Prevalence Data, 2011*.

Asthma Emergency Department Visits, Indiana, 2012



How are the
students in your
COUNTY doing
with their
asthma control?



Why are healthcare providers in the clinic setting not using an AMP for their patients?



Healthcare providers (HCP) in the clinic setting generally perceived AMPs as useful, but implementation is hampered by lack of training and practice, language barriers and perceived benefits for patients (Tan et al., 2009).

Qualitative research found that HCPs were unenthusiastic about standardized plans for individual patients, preferring to monitor them individually (Hardy, 2003).

Are children being given AMPs at their healthcare provider's office/clinic?

- ❖ Nationally, only 25%-56% of eligible patients receive an AMP
- ❖ The #1 reason patients do not have AMP is that the clinicians didn't give them one
- ❖ 90% of patients surveyed found AMP helpful in self-management of their disease



Statewide AMP availability

- InJAC (Indiana Joint Asthma Coalition)
website <http://InJAC.org>
- DOE school district websites statewide
 - This plan has been approved by the legal department of the Indiana Department of Education for use with students effective immediately.

Who can sign the AMP?

- ❖ Any healthcare professional with prescriptive authority in the state of Indiana can sign the AMP
- ❖ The AMP is both a prescribed plan to manage a student's asthma and an order to dispense medication (i.e. albuterol) in compliance with state law

Language availability

- English
- Spanish
- Burmese

These plans are available at <http://www.InJAC.org>



Components of the AMP

A yellow ruler with black tick marks is positioned diagonally across the slide, partially overlapping the title and the list.

❖ RED ZONE

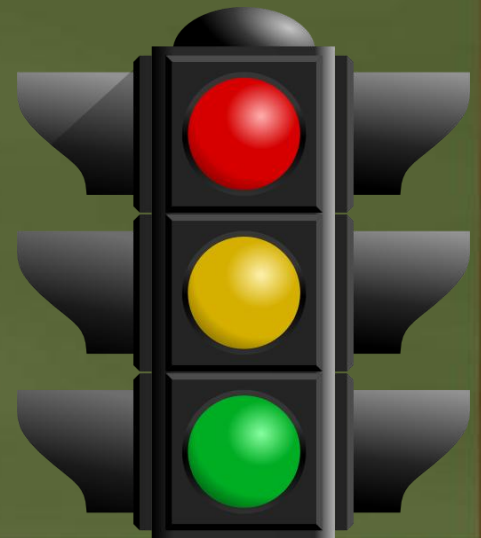
❖ YELLOW ZONE

❖ GREEN ZONE



RED ZONE

- ❖ **RED ZONE:** danger signs
 - • Very short of breath, or
 - • Rescue medicines have not helped, or
 - • Cannot do usual activities, or
 - • Symptoms are same or get worse after 24 hours in Yellow Zone
- ❖ **RED ZONE:** EMERGENCY Signs
 - • Lips and fingernails are blue or gray
 - • Trouble walking and talking due to shortness of breath
 - • Loss of consciousness



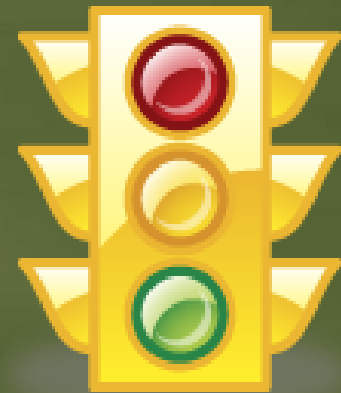
RED ZONE

- Give rescue medication: per order (1 min between puffs), inhaler or nebulizer
 - call parent and/or Asthma Care Provider

- Call 911 NOW if:
 - 1. Unable to reach medical care provider after arriving in the red zone
 - 2. Child is struggling to breathe and there is no improvement after taking albuterol
 - 3. May repeat rescue medication every 10 minutes if symptoms do not improve, until medical assistance has arrived or you are at the emergency department

YELLOW ZONE

- **YELLOW ZONE:** caution signs
 - Cough, wheeze, chest tightness, shortness of breath, waking at night due to asthma, or can do some, but not all usual activities



YELLOW ZONE

- ❖ Continue daily controller medications
 - Give rescue medication: per order (1 min between puffs)
OR 1 nebulizer treatment every 4 hours as needed
- ❖ Wait 10 minutes and recheck symptoms
- ❖ If not better, go to **RED ZONE**
- ❖ If symptoms improve, the AMP will indicate if the student may return
to class or normal activity, or give other directions
- ❖ Parent/School Nurse: If needed, coordinate rescue medications to be given every 4 hours for the designated timeframe, if symptoms remain improved
- ❖ If symptoms are not gone after either 2 or 3 days (will be designated by prescriber), move to the **RED ZONE**

GREEN ZONE

- GREEN ZONE: WELL
- No cough, wheeze, chest tightness, or shortness of breath during the day or night
- Can do usual activities



GREEN ZONE

- ❖ Administer medications as instructed in **RED/YELLOW** zones
- ❖ AMP may indicate that the student has been instructed in the proper use of all his/her asthma medications, and in my opinion, the student can carry and use his/her inhaler at school
- ❖ May indicated that the student needs supervision or assistance to use his/her inhaler medication
- ❖ May indicate that the student should NOT carry his/her inhaler while at school and if they are to use a spacer with their inhaler medication

Parental permission

PARENTAL PERMISSION STATEMENT:

- I give permission for the school nurse and any pertinent staff caring for my child to follow this plan, administer medication and care for my child, contact my asthma care provider if necessary and for this form to be faxed/emailed to my child's school or be shared with school staff per FERPA guidelines. I assume full responsibility for providing the school with prescribed medication and delivery/monitoring devices.

Summary:

Expected outcomes

- ❖ To improve communication between school nurses and healthcare providers about students' asthma
- ❖ To increase utilization of AMPs by healthcare providers, school nurses, and asthma patients
- ❖ To increase community awareness of the importance of AMPs
- ❖ To increase education about the management of asthma, even for those that are not currently affected
- ❖ To collect data on the AMP use and make it available to other researchers and asthma experts. During the initiation of the AMP implementation, data will be collected for a formative evaluation



InJAC's contact information

- <http://www.InJAC.org>
- IndianaAsthma@gmail.com

